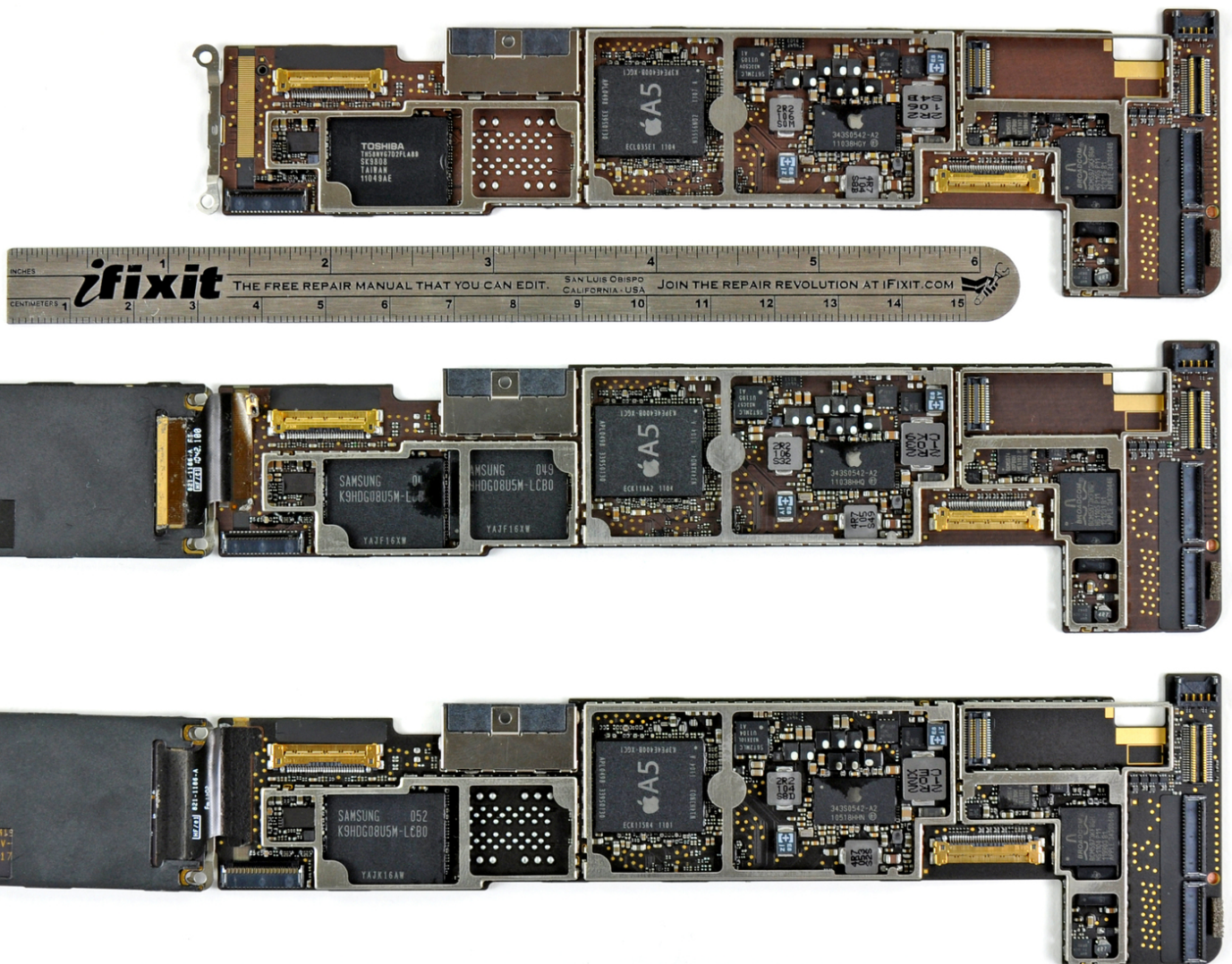




iPad 2 3G GSM & CDMA Teardown

Comparison between GSM, CDMA, and Wi-Fi only iPad 2s.

Written By: Miroslav Djuric



INTRODUCTION

Apple decided to offer the iPad 2 in a number of flavors that would make Baskin Robbins proud: two colors, three drive capacity sizes, and three connectivity choices (Wi-Fi only, 3G GSM on AT&T, and 3G CDMA on Verizon). All in all, that's 18 different versions of essentially the same device.

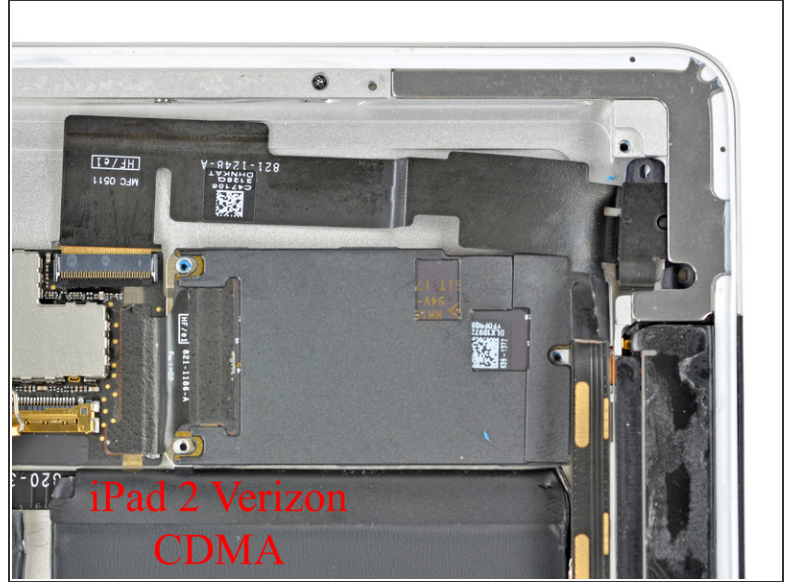
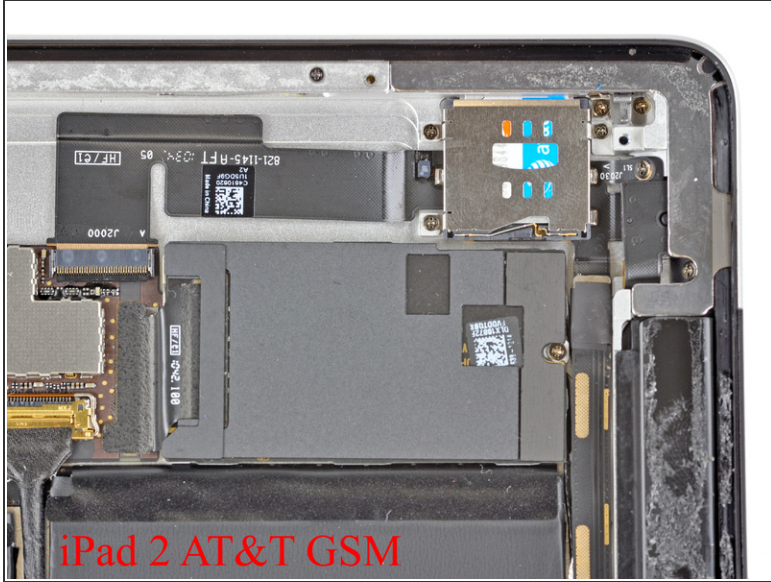
Our original [iPad 2 teardown](#) featured the black, 16GB, Wi-Fi only version. There's absolutely no reason why we'd take apart 17 other iPads, but we felt it worthwhile to at least document the differences between the Wi-Fi only, GSM, and CDMA versions.



TOOLS:

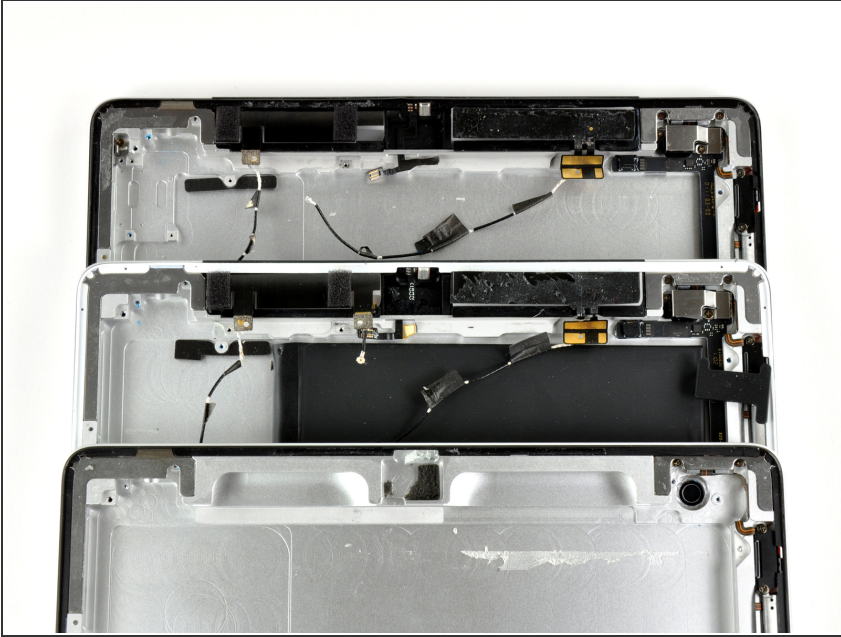
- [Phillips #00 Screwdriver](#) (1)
 - [iFixit Opening Tools](#) (1)
-

Step 1 — iPad 2 3G GSM & CDMA Teardown



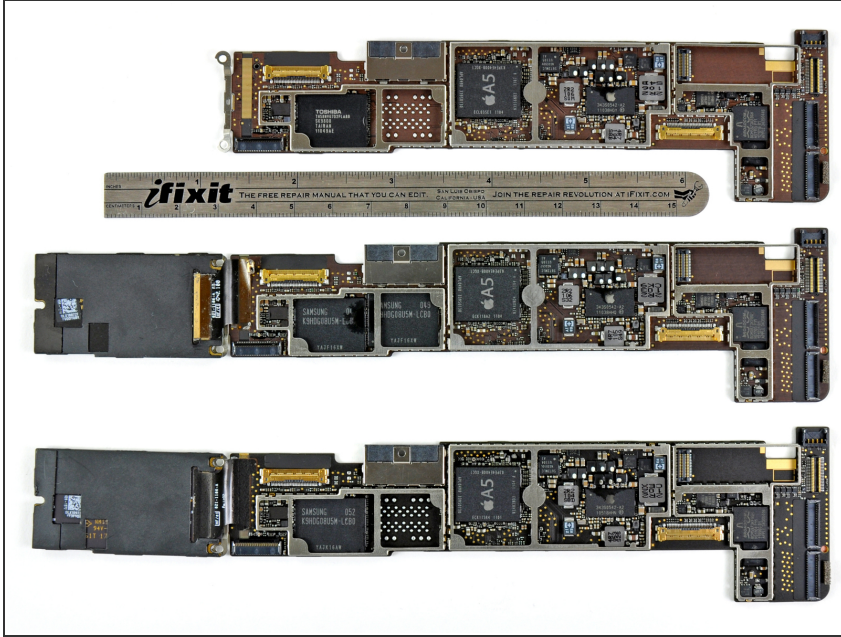
- When comparing the GSM and CDMA versions of the iPad 2, the most obvious difference is the microSIM slot.
- The microSIM slot is located in the upper left corner of the GSM iPad 2. The case is machined uniquely in this area on GSM models to accommodate the SIM ejector mechanism and the SIM tray.
- In contrast, the CDMA version doesn't rely on SIM cards of any sort and uses the circuitry on the WWAN board to relay user information. This adds up to an empty space in the outer case above the WWAN board where the microSIM slot was installed on the GSM version.

Step 2



- From top to bottom, a comparison of the WWAN antennas in the GSM, CDMA, and Wi-Fi versions, respectively.
- There is one more antenna in the CDMA version of the iPad 2, which is similar to the antenna configuration of the Verizon iPhone 4.
- For additional information on why GSM and CDMA require different antenna geometry, check out our [iPhone 4 Verizon teardown](#).
- Obviously, the Wi-Fi version has no WWAN antenna and thus has no black plastic antenna window along the top edge of its case. Instead, it makes do with solid aluminum.
- ① Of the three, having the Wi-Fi-only version in your chest pocket is your best bet if someone decides to shoot at you.

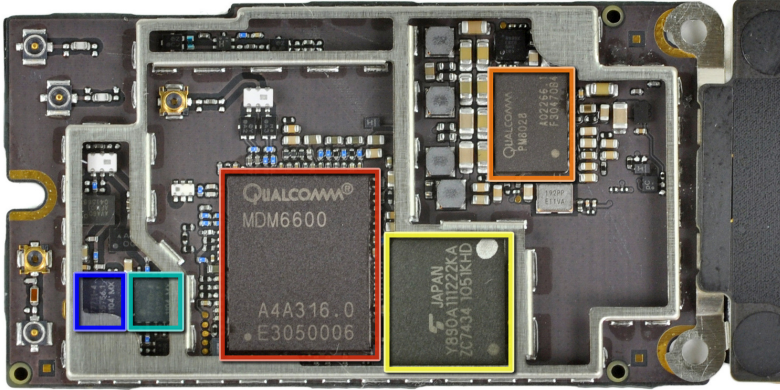
Step 3



- [Shown here](#) are the logic board in the Wi-Fi, GSM, and CDMA models (listed from top to bottom).
- ⓘ iFixit's [6-inch metal ruler](#) is shown to provide scaling.
- The WWAN boards on the 3G models are connected to their logic boards via surface-mounted ribbon cables.
- These cables make the WWAN board not user-replaceable, as the cables securely (and permanently) attach the WWAN board to the logic board.

Step 4

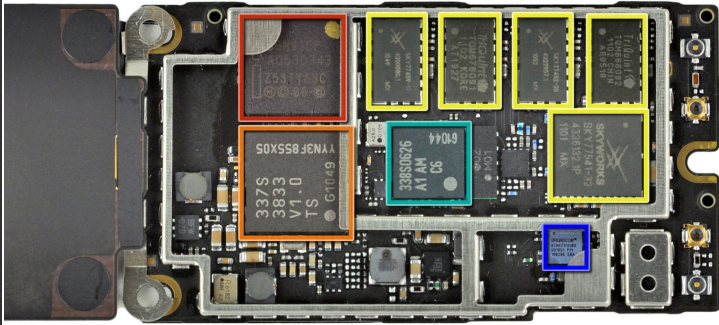
iPad 2 Verizon CDMA



- Chips providing 3G connectivity for the CDMA iPad 2 include:
 - Qualcomm [MDM6600](#) Baseband/RF Transceiver
 - Qualcomm [PM8028](#) Power Management IC
 - Toshiba Y890A11222KA, likely a DRAM + flash MCP
 - Skyworks [77710](#) Power Amplifier Module
 - Skyworks [77711](#) Power Amplifier Module
- ① Unsurprisingly, all of these chips are found in the [Verizon iPhone 4](#).

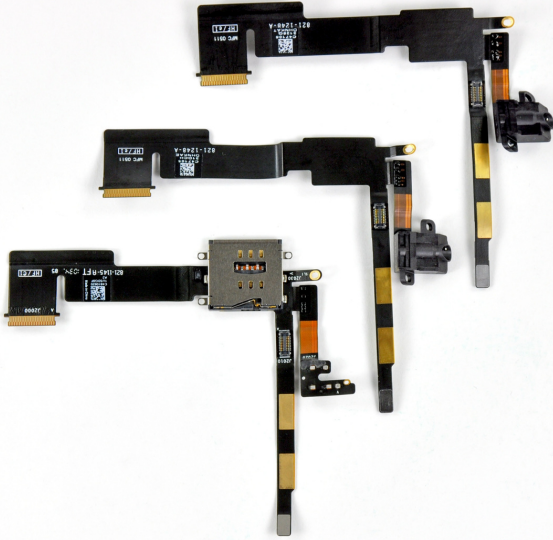
Step 5

iPad 2 AT&T GSM



- Big players on the GSM iPad 2 3G board include:
 - Intel 36MY1EF containing 128Mb of Numonyx NOR flash and Elpida Mobile DDR SDRAM.
 - Infineon [337S3833](#) Baseband Processor
 - Skyworks & TriQuint Transmit Modules
 - Infineon 338S0626 GSM/W-CDMA Transceiver
 - Broadcom [BCM4751](#) Integrated Monolithic GPS Receiver; an update from the BCM4750 found in the [iPhone 4](#).

Step 6



- A comparison of the headphone jacks (from top to bottom): Wi-Fi, CDMA, and GSM.
- By and by, the headphone jacks are identical, with the exception of the GSM version which houses a microSIM card slot.
- ① Since the CDMA version has no microSIM card slot, it actually uses the exact same headphone jack assembly as the Wi-Fi version.
- ① Astute readers will also notice the GSM's headphone jack missing. It paid the ultimate sacrifice for our iPad 2 [headphone jack article](#).

To reassemble your device, follow these instructions in reverse order.

This document was last generated on 2017-06-19 05:45:29 AM.